

Fortwin-Phenergan combination induced Pseudoaneurysm –A Drug Addiction Case Report

Dr.Ramesh Narula ¹, Dr.Yasir Salam Siddique ², Dr.Kusum Narula ³

Abstract

Introduction: Prescription drug abuse is the use of a medication without a prescription, in a way other than prescribed, or for the experience or feelings elicited. The consequences of this abuse have been steadily worsening, reflected in increased treatment admissions, emergency room visits, and overdose deaths. We here by present a case of an adolescent who was self injecting Fortwin (Pentazocine) and Phenergan (Promethazine) combination intravenously from a long time which led him to a critical condition of Pseudoaneurysm in the right groin. **Case report:** An 18 years boy was brought in the orthopedic OPD on stretcher with pain and swelling in the whole right lower limb from ten days. He had lost his parents in childhood. No obvious reason of swelling was given by the patient or his guardian. On local examination; there were multiple scar marks on the body. They were quite prominent in the groin on both sides. Magnetic Resonance Imaging (MRI) of right thigh revealed findings highly suggestive of Pseudoaneurysm. After a repeat history taking guardian then admitted, that he is a drug addict and for more than two years he injects intravenously Fortwin-Phanergan injections. **Discussion:** Femoral Pseudoaneurysm is a serious complication in drug addicts who habitually inject via the groin. Most of the patients belong to younger age group. Medical representatives and medical stores are supplying the consignment to the addicted youths at a higher price without prescription and such incidents are on the rise. **Conclusion:** As per WHO-UMC criteria, Fortwin (Pentazocine)-Phenargan (Promathazine) combination is probable cause of Pseudoaneurysm.

Key words: Drug Addicts, Fortwin-Phenargan combination, Pseudoaneurysm

¹ Associate Professor, ² Assistant Professor, ³ Demonstrator, Community Medicine

Rohilkhand Medical College, Bareilly-243006 (UP), India

Corresponding e-mail address - rameshnarula55@gmail.com

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Introduction: Addiction comes from the Latin verb “addicere”, to give or bind a person to one thing or another. Generally used in the drug field to refer chronic, compulsive, or uncontrollable drug use, to the extent that a person (an “addict”) cannot or will not stop the use of some drugs. It usually implies a strong psychological dependence and physical dependence resulting in a Withdrawal syndrome when use of the drug is stopped¹. Prescription drug abuse is the use of a medication without a prescription, in a way other than prescribed, or for the experience or feelings elicited. The consequences of this abuse have been steadily worsening, reflected in increased treatment admissions, emergency room visits, and overdose deaths². We here by present a case of an adolescent who was self injecting Fortwin-Phenergan combination intravenously from a long time. On local examination, whole right lower limb was swollen (Figure 1).

which led him to a critical condition of Pseudoaneurysm in the right groin.

Case report: An 18 years boy was brought in the orthopedic OPD on stretcher with pain and swelling in the whole right lower limb from ten days. There was no history of trauma, swelling of other joints, fever, cough with expectoration, nodules in the body, loss of weight, smoking, alcoholism, and convulsions. In the family history he had lost his parents in childhood, had no real brother or sister and was brought up by his maternal uncle. The boy was eighth class pass. No obvious reason of swelling was given by the patient or his guardian.

On general examination patient was fully conscious, well oriented in time and place. His vitals were intact, icterus absent, pallor positive and a febrile.



Figure 1 Grossly Swollen Right Lower Limb

He was able to flex and extend his toes and ankle also to some extent but was unable to lift the lower limb or bend the knee after 30 degrees of flexion. Signs of inflammation

were positive. There were multiple scar marks on the body. They were quite prominent in the groin on both sides **(Figure 2a and 2b).**



Figure 2a-Scar marks in Left Groin



Figure 2b- Scar mark in Right Groin



Figure 3: Scar marks on Medial aspect of left ankle

Scar marks were also seen on the left ankle (Figure 3). Dorsalis pedis, posterior tibial, popliteal and femoral arteries were normal in the left lower limb but could not be palpated on the affected side. Capillary fill was normal. Sensations were normal. Patient was thus admitted for investigations.

Hemoglobin was 8 gm %, CRP positive, ESR raised. Liver function and renal function tests were within normal limits. X-ray pelvis with both hip joints –AP view,

right femur, knee, leg and ankle were normal. MRI of right thigh (Figure 4) revealed well defined heterointense lesion in antero-medial aspect causing marked splaying and thinning of femoral vessels. The mass was seen closely abutting the femoral artery with differential layering fluid levels and diffuse myofascial edema. These findings were reported as highly suggestive of pseudo-aneurysm.



Figure 4: MRI of Right Thigh

In two days of observation it was noted by the nursing staff and residents that this boy is highly restless, has certain abnormal behavior and also unable to sleep even after tranquilizers. Hence a repeat history taking was done with counseling .The guardian then frankly admitted that he is a drug addict and for more than two years he injects intravenously Fortwin-Phenergan injections. This case was then labeled as Fortwin-Phenergan drug addict and psychiatrist opinion was sought. In view of Pseudo aneurysm he was referred to a higher centre for needful.

Discussion: According to research report series of National Institute on Drug Abuse of U.S. department of health and human services, although many medications can be abused, the most commonly abused drugs are: Opioids which are usually prescribed to treat pain. Central nervous system depressants used to treat anxiety and sleep disorders; and Stimulants which are most commonly prescribed to treat attention deficit hyperactivity disorder ². Our patient was addicted to Fortwin which is an Opioid.

Orissadiary.com current news also confirms the above statement and says that many youths particularly the college students are in habit of taking Fortwin injections. Medical representatives and medical stores are supplying the consignment to the addicted youths at a higher price without prescription and such incidents are on the rise in the town ³. The fact that our patient was taking these injections from more than two years means that these injections are readily available for the purpose of drug abuse.

Phenergan (Promethazine) is an antihistamine which is used clinically for the temporary relief of coughs and upper respiratory symptoms associated with allergy or the common cold. One of the main characteristics of this drug is that it has a sedative effect and also known to cause euphoria ⁴. This could be the reason that our patient was taking this in combination with Fortwin.

A Pseudoaneurysm, sometimes called a false aneurysm, is a dilated artery or blood vessel. This can form after an artery is injured causing blood to leak and pool

outside the artery's wall. In a true aneurysm, the artery or vessel is enlarged, but the enlargement doesn't result from an injury and blood flows normally through the aneurysm. This may occur due to a complication of cardiac catheterization, in which a catheter is inserted in the femoral artery in the groin⁵. After catheterization femoral artery hematoma, arteriovenous fistulas, or Pseudoaneurysm, are common because of high pressure flow from the punctured vessel. Femoral vein Pseudoaneurysm however is rare⁶.

Femoral Pseudoaneurysm is a serious complication in drug addicts who habitually inject via the groin. A total of 33 drug addicts presenting with 34 infected femoral Pseudoaneurysms were treated in the Department of Surgery, the University of Hong Kong, Queen Mary Hospital from July 1993 to June 1996. There were 27 men and 6 women, with ages ranging from 23 to 76 years (mean 39.6 years). Positive intra-operative tissue cultures were seen in 29 (85%), with 17 being pure growth of Methicillin-sensitive Staphylococcus aureus (MSSA). Twenty-four Pseudoaneurysms involved the femoral bifurcation⁷.

In a study focused mainly on Pseudoaneurysms of intravenous drug abusers done in Pakistan apart from groin the other sites found were cubital fossa, thigh, popliteal fossa and also clavicular region. Similar to majority of studies, most of the patients belonged to younger age group⁸.

Conclusion:

As per WHO-UMC criteria, Fortwin(Pentazocine)-Phenargan (Promethazine) combination is probable cause of Pseudoaneurysm.

Based on this, Pharmacist should not dispense such drug that is under classified from drug of abuse without prescription.

Also pharmacist should check the drug of abuse prescription and note down.

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